

Work Order ID 94486

94486

Page 1

December-19-12 11:26:49 AM

Item ID: DSI 9052-013

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Pod Quick Release

Stop *NS2*

Start Date: 12/19/12 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/19/12 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MCS Date: 12-12-14 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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DSI 9052

E

100

100

DC

Document Control

DOCUMENT CONTROL

Memo

Photocopy bluefile & type labels per PPP 9052-013 CHG001

0.00

0.00

0.00

0.00

0.00

0.00

110

110

Packaging

Packaging

Pick Kit

Memo

120

120

QC

Quality Control

QC4- 100% Inspect kits for completeness

Memo

DAS
15
13-128

DAS
15
13-128

1 DAS MCS 13-1-25

1 DAS 06 13-01-25 JB

1

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY										
Landing Gear			General							
<input type="checkbox"/> Bending	<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> Cracks	<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Cuffs	<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Wave/Twist in Tube
<input type="checkbox"/> Bend	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Burrs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Countersink	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Drawing	<input type="checkbox"/> Finish	<input type="checkbox"/> Folio
<input type="checkbox"/> Grain	<input type="checkbox"/> Hardware	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Misread	<input type="checkbox"/> Offset	<input type="checkbox"/> Out of Calibration	<input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions
<input type="checkbox"/> Ovalized	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced	<input type="checkbox"/> Temperature/Cure	<input type="checkbox"/> Weld	<input type="checkbox"/> Wrong Stock Pulled
							<input type="checkbox"/> Other			
<div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 15px; width: 100%;"></div>										

Work Order ID 94486

94486

Page 2

December-19-12 11:26:49 AM

Item ID: DSI 9052-013

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Pod Quick Release

Start Date: 12/19/12 Start Qty: 1.00

1

Cust Item ID:

Required Date: 12/19/12 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Packaging	0.00							
Packaging	Memo								
Packaging	Identify and pack for shipping as per PPP D9052-013								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

Location: FG03
Rev A

12 13/1/20 0.06
13/1/28
NE
13-1-28

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Picklist Print

December-19-12 11:26:48 AM

Page 1

Work Order ID: 94486
 Parent Item: DSI 9052-013
 Parent Item Name: Pod Quick Release

Start Date: 12/19/12 Required Date: 12/19/12
 Start Qty: 1.00 Required Qty: 1.00

Comments: IPP Rev:A02.05.15New IssueNG

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
BLRS-010 Pip Pin		Purchased	No			110	Each	33.0000	1	1			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		4							
				121374		4							
				ST282		29							
				122730		29							
BLRS-020 Pip Pin		Purchased	No			110	Each	20.0000	3	3			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		4							
				122168		4							
				ST282		16							
				123149		16							

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>						Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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REFERENCE ONLY

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-607 REV. F OR LATER REV.
(REF. CANADIAN STC: SH94-14, REF. FAA STC: SR00213NY)
AND TO AMEND INSTALLATION DRAWING D350-602 REV. E OR LATER REV.
(REF. CANADIAN STC: SH93-97, REF. FAA STC: SR01144NY)

PURPOSE: TO ALLOW SUBSTITUTION OF THE BASKET/ POD ATTACHMENT BOLTS WITH QUICK RELEASE PINS

THE AN4-12A / AN4-15A / AN4-16A BOLTS USED ON D2230-1 CLAMPS MAY BE REPLACED WITH STAINLESS STEEL POSITIVE LOCKING QUICK RELEASE PINS WITH A MINIMUM DOUBLE SHEAR STRENGTH OF 2400 LBS AND 0.25 INCH DIAMETER.

BOLT	MIN GRIP	POSSIBLE QUICK RELEASE PIN REPLACEMENT
AN4-12A	1.0"	AVIBANK: BLC4B10S, BLC4TA10S, BLC4R10S, BLC4LA10S MS NUMBER: MS17984C410, MS17985C410, MS17986C410, MS17987C410 REID: BLRS-010, BLBS-010
AN4-15A / AN4-16A	1.3"	AVIBANK: BLC4B13S, BLC4TA13S, BLC4R13S, BLC4LA13S MS NUMBER: MS17984C413, MS17985C413, MS17986C413, MS17987C413 REID: BLRS-020, BLBS-020

THE FOLLOWING OPTIONAL KITS ARE AVAILABLE FROM DART TO PROVIDE QUICK RELEASE CAPABILITY. DART HELI-UTILITY-BASKETS™ D350-607-041 @ CHG 008, D350-607-043 @ CHG 005, D350-607-045 @ CHG 003, D350-607-047 @ CHG 003, OR LATER CHANGE NUMBERS, OR KITS MODIFIED PER SERVICE INSTRUCTION DSI 9342 USE AN4-15A BOLTS AND SHOULD PURCHASE THE DSI-9052-013 KIT. EARLIER CHANGE NUMBERS THAT HAVE NOT BEEN MODIFIED PER SERVICE INSTRUCTION DSI 9342 USE AN4-12A BOLTS AND SHOULD PURCHASE THE DSI-9052-011 KIT.

QTY	QTY	PART NUMBER	DESCRIPTION
-011	-013		
X		DSI-9052-011	QUICK RELEASE KIT, FOR D350-607-041 (CHG ≤007) / -043 (CHG ≤004) / -045 (CHG ≤002) / -047 (CHG ≤002)
	X	DSI-9052-013	QUICK RELEASE KIT, FOR D350-602-011/-013/-014 & D350-607-041 (CHG 008) / -043 (CHG 005) / -045 (CHG 003) / -047 (CHG 003)
4		BLRS-010	QUICK RELEASE PIN (1.0" GRIP)
	3	BLRS-020	QUICK RELEASE PIN (1.5" GRIP)

IT IS ACCEPTABLE TO LEAVE THE D2230-1/-3 CLAMPS INSTALLED ON THE CROSSTUBES WHEN THE BASKET OR POD IS REMOVED. WEIGHT & BALANCE, FOR CLAMPS ONLY, IS 1.8lb (0.82kg) @ STA 135in (3.43m) & BL ±36in (±0.91m).

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 09.06.23
CERT. NO.: SH94-14 / SH93-97
ISSUE NO.: 4 / 4

E	-013 KIT NOW APPLICABLE TO NEW D350-607 KITS	CP	09.06.23
D	ADD CLAMPS ONLY NOTE	KJ	04.03.23
C	ADD DSI 9052-013	CP	03.12.11
B	ADD PART NUMBERS	BW	96.11.13
A	NEW ISSUE	MM	96.11.04
REV.	DESCRIPTION	BY	DATE
DESIGN	MM	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
MFG. APPR.	N/A	DSI 9052	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	QUICK PIN REPLACEMENT	NTS
DATE	09.06.23	COPYRIGHT © 1996 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	